

## Laws running after outer space: legal challenges lie ahead



*Mar 01 2016*

The use and exploration of outer space is facing novel challenges in recent years: from the privatization and commercialization of outer space activities to the increasing dependence on space applications, products and services, the space landscape is changing and growing.

However, the main international legal framework for space activities remains the UN Space Treaties and Principles, drafted decades ago long before the recent trends were envisaged. On the other hand, legal and regulatory regimes and policies with impact on space activities fall short of the needs of these activities due to their specific features and the nature of outer space as “province of all mankind”.

This is shown in several areas, such as the following:

- The Space Treaties focus on States’ and their responsibilities and liability for space activities, and not on privates and individuals, who are increasingly relevant stakeholders and recipients of space activities;

- The growing number of satellites increases the demand for concerted efforts in guaranteeing space sustainability as a condition for the use of outer space for the benefit of all countries, a principle enshrined in the Outer Space Treaty. This needs to be addressed not only from a physical point of view (with a focus on addressing overcrowding and the space debris issue) but also with relation to the ITU framework relating to frequency and orbital slots allocation, which will become increasingly under pressure;
- The growing number of cooperative projects, together with the increase of space actors (including public ones) and of satellite ownership transfers, may present challenges for current rules on control and jurisdiction of a space object, as well as for registration and liability;
- The increasing resort to satellite communications, including for broadcasting, may lead to growing tension over the principles of free flow of information and the sovereign control of a state over the domestic flow of information especially in light of security concerns and taking into consideration ITU provisions and the UN Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting;
- The scope of the international provisions on remote sensing (the Principles Relating to Remote Sensing of the Earth from Outer Space) may be insufficient in light of the huge amounts of data collected and processed downstream, the increasing number of entities intervening in these activities and the pervasiveness of satellite earth observation. Several issues arise therefrom, including with relation to the potential conflict between the breadth of earth observation and the right to privacy, as well as the use of satellite images as a means of proof;
- The increasing resort to satellite navigation and positioning services also raises several legal issues, such as the ones relating to damage that may arise from incorrect data or from data misuse (an issue shared with satellite remote sensing);
- Cyber-attacks against satellites and data, and intentional disruption of communications, may require a more structured legal approach to the concept of

damage under international law, as well as with a view to guaranteeing the coordination of efforts in preventing, investigating and prosecuting these situations;

- Intellectual property over technology and especially data derived from space activities needs to be analysed and clarified with a view to determining which rights apply, who benefits from them and how they can be exploited;
- Suborbital and future space flights may require a reassessment of current legal provisions including with relation to astronauts and their qualification as “envoys of mankind”;
- Space mining needs to be evaluated from a legal point of view in light of the principle that outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, and with a view to assuring that the benefits of space will remain to be used to the benefit of all mankind.

These and other legal and regulatory challenges are not easy to tackle: there will be the need to bring together governments, the private sector and scientific institutions so that the creation of legal rules or at least of guidelines and manuals in these areas balance the competing interests at hand whilst at the same time contribute to promote innovation and the space market. Whilst complete or ambitious international legal reforms do not seem to lie in the horizon in the short medium term, guidelines, strategies, recommendations and others may go a long way to clarify the legal environment for space and thus create more certainty for states, privates and the end users.

As way of example, duplicating efforts to guarantee that States with space activity approve internal space laws that can reflect international obligations whilst following best practices in this matter will contribute to creating a harmonised legal regime for space activities worldwide. Reassessing the conditions of spectrum management in light of technological developments in dynamic spectrum management will become increasingly relevant. Clarifying the requirements, constraints and impacts of the processing of personal data collected through satellites similarly to what the Article 29 Data Protection Working Party has done with drones (Opinion 01/2015 on Privacy and Data Protection Issues relating to the Utilisation of Drones) could be of great use. Issuing guidelines relating to

security/cybersecurity in space, including during armed conflict, would be essential. Clarifying the conditions of intellectual property protection over data collected by satellites (including in light of the regimes of copyright and “author’s right” and of the protection of databases) could help to better determine under what conditions data can be protected and made available.

If the full benefits of outer space are to be effectively seized, the legal and regulatory issues need to be carefully addressed. Only then will this new diversified space landscape be able to reap the full benefits that outer space can bring for all humanity.

If you’re interested in networking with your peers, showcase your work and engaging with the latest trends, remember to register for the Space Innovation Congress, which takes place in London on 7th-8th April 2016:<http://spaceinnovationcongress.com>

Blog post written by Magda Cocco and Helena Correia Mendonça from Vieira de Almeida Ltd



Source: [http://www.spaceinnovationcongress.com/blog/2016/03/satellites/laws-running-after-outer-space-legal-challenges-lie-ahead/?utm\\_source=Newsletter+signups&utm\\_campaign=4d37bbd619-Newsletter\\_2\\_March3\\_2\\_2016&utm\\_medium=email&utm\\_term=0\\_7ee624010c-4d37bbd619-129443149](http://www.spaceinnovationcongress.com/blog/2016/03/satellites/laws-running-after-outer-space-legal-challenges-lie-ahead/?utm_source=Newsletter+signups&utm_campaign=4d37bbd619-Newsletter_2_March3_2_2016&utm_medium=email&utm_term=0_7ee624010c-4d37bbd619-129443149)